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ABSTRACT

This learning module, which is intended for use in in-service training for vocational rehabilitation counselors, deals with effectively supervising groups of clients in a production setting. The following topics are discussed: the purposes of production, production strategies, supervisory tactics, ways of making criticism effective, practical supervision strategies, special methods for difficult problems, and pitfalls in supervision. The module also includes a list of references, seven self-tests, and a worksheet dealing with choosing a production strategy. An appendix includes material from McLaughlin and Wehman's "Vocational Curriculum for Severely Handicapped Students." (MN)

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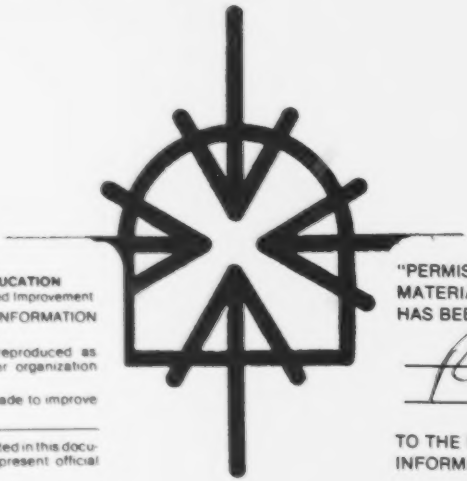

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REHABILITATION ASSOCIATE TRAINING
FOR EMPLOYED STAFF

MODULE: RA-39 Production Supervision

DESCRIPTORS: Production, instructions, praise and criticism ratios, cruising, low production, acquisition problems

OVERVIEW: This module deals with methods of effectively supervising groups of clients in a production setting. A variety of procedures are reviewed targeting such behaviors as production rate, acting out, etc. This module is an excellent "production concentrated" supplement to the R.A.T.E.S. course on behavior management.

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Objectives

1. List two issues which determine how often you should praise in individual client.

2. For an assigned situation in which a client has a low production rate or poor quality, describe three practical ways to improve production. These methods may include any from the following list and must be described in detail:

   Frequent reinforcement or feedback
   Differential reinforcement of high-rate behavior
   Ratio reinforcement schedules
   Decreasing interfering behaviors
   Modeling
   Positive practice with speed prompts
   Self-management
   Reducing distractions
   Using jigs
   Using extra cues
   Reducing unnecessary motions
   Modifying the task or task analysis

3. Demonstrate supervision including:

   a. a praise rate of 1 praise/min.
   b. a praise to criticism ratio of at least 3 to 1
   c. at least 1 physical or verbal contact with each client
   d. at least 80% of instructions or corrections given include a clear sequenced description of the behavior to be done, are stated with no personal insults, and include a supervision check with feedback

Evaluation

1. Written test

2. Written test. A situation will be presented

2. by the instructor or chosen by the student. The situation may be assigned on a written test, or it may be an actual situation from the student's work setting.

3. Performance observation will be made in either a role-played or actual work setting.

The roles and purposes of production in a rehabilitation facility are often unclear and sometimes controversial. Before discussing how to improve production, we should define what we mean by the term and tell what roles production can fill.

Definition of production: We will define production as *any tasks done by clients (a) which involve producing or transporting goods or providing services, (b) which are potentially marketable, and (c) which are performed for some purpose beyond the development of a client's skills.*

The first part of the definition makes clear that production includes not merely the making of a product, but also transporting necessary materials and the product. Furthermore, it includes providing services which do not produce a tangible product, for example, working on a janitorial crew.

The second part of the definition brings out the marketing aspect of production. Products and services are money-making. The money may go directly to the client or may go into the budget of the agency. In any case, production tasks differ from those other tasks which are not money-making, such as learning to read, dressing appropriately, and developing social skills. Production differs from training of clients in leisure time skills. Making ceramics to be sold is different from making ceramics as a hobby.

son wishes and need satisfy no one else.

The third part of the definition states that there is some purpose beyond mere development of a client's skills. That part of the definition implies two notion First, production is not wholly a rehabilitation activi it may also be for purposes of fundraising, providing a normal environment, filling time, or all three. Second, production is, to at least some extent, aimed at developing the client's skills. Assignment of tasks to client should not be made simply on the basis of who can already do them, but also on the basis of who will learn new skills from doing them.

Purposes of Production

There are three major purposes of production in a rehabilitation program:

a. Production provides opportunities to train clients in skills which allow for more independent employment (i.e., movement from work activities to sheltered or competitive employment). These skills include physical skills (such as using a screwdriver), cognitive skills (such as assembling items in a sequence), and work adjustment skills (such as working for long periods without help or immediate reinforcement).

b. Production brings money into the agency. Good contracts and sales of prime manufacturing goods can account for a substantial portion of an agency's budget.

c. Third, work is important not only for the money it brings in, but also as a sign of adulthood and worth as a person. Thus, the handicapped person who performs meaningful, marketable labor is looked on as a more worthwhile person.

When planning the production activities of a facility, it is important to look at all three of these purposes The agency which focuses strictly on skill development may lose sight of what the skills are for. It may emphasize skills which are unrelated to the task

of developing the client's vocational capabilities. The agency which focuses strictly on the money-making potential of production may forget that its original purpose is to serve clients; it may, in fact, refuse to place good workers and refuse to accept workers who need extensive training. The agency which focuses strictly on normalization without regard for the developmental needs of clients or the wishes of the marketplace may forget that they need to learn new skills; it may also not be able to keep financially solvent. The ideal place of production is to improve clients' vocational potentials by teaching them to perform meaningful, profitable tasks.

(SEE SELF-TEST # 1)

Production Strategies

Because the purposes of production include both habilitation and profit-making, selecting of production strategies needs to involve both purposes. Selection of items and tasks to be produce , as well as strategies for producing them, requires consideration of both their marketability and their usefulness in habilitation.

For purposes of profit-making, production should be done as efficiently and inexpensively as possible The major types of costs might be broken into two categories: production costs and training costs (Bellamy, 1979). Production costs include salary (hourly rates, salary required for materials handling), supervisory time, materials costs (including waste), and costs of equipment and energy required to operate the equipment. Training costs include the trainer's time, salary paid during the trainee's time, and training materials.

Ideally, production strategies should minimize both production and training costs. Often, however, production costs may be minimized by better training, or training costs may be minimized by better supervision, automation, use of jigs, or other fixtures, or partial performance of the task by super

visors. The agency must decide, in these cases, whether to spend more money on production costs (and minimize training) or to spend more money on training costs (in order to minimize production costs).

Rehabilitation must also be considered. Sometimes, efficient and low-cost production methods do not serve habilitative purposes. For example, a client who needs extensive practice in using both hands (in order to improve muscle strength or coordination) might be assigned to assemble a machine part. An inexpensive fixture might hold the part so that the client would need to use only one hand. The fixture might reduce both training and production costs. However, for habilitative purposes, it may be better to require the client to hold the part and use both hands throughout the assembly.

One consideration, related to the value of skills to the client, is the probability of job placement in competitive employment. Clients who are likely to be placed in the near future should be assigned tasks with high habilitation value. Tactics for jobs assigned to clients who are expected to remain in extended employment may emphasize low production and training costs.

When establishing the production tactics to be used for a given task, all three issues--minimizing production costs, minimizing training costs, and maximizing habilitation--must be considered and balanced. Where the emphasis will lie depends on a number of considerations.

(SEE SELF-TEST #2)

Supervisory Tactics

One of the major production costs is supervisory time. Productivity is improved by *effective supervisory behaviors*. In this section, a variety of supervisory tactics will be discussed.

Setting clear rules and objectives. The quickest and usually most effective supervisory tactic is the setting of clear rules and objectives. Supervisors should determine those rules which are necessary for production in their areas. For example, a client may be leaving his work station and disrupting others when he needs help. A rule might be, "when you need help, go to the supervisor." For a client who is working very slowly, an objective might be, "Assemble 25 rods each hour."

Giving instructions. There are effective ways and ineffective ways to give instructions. There is one important rule to follow--Be Brief. Describe the task in as few words as possible. The steps in giving an effective instruction are the following:

1. Tell the person what you want to be done
2. If the task is complicated, break it down into small steps.
3. Describe two or three of the steps.
4. Ask the client to do those steps.
5. If the client does the steps, list the rest of the steps.
6. Ask the client to do those steps.
7. If he does, repeat the original instruction and have him do the whole task.

Following are examples of instructions which might be given when telling a client how to collate papers:

> *Poor example:* You have to put all these papers together in order. It's very important that they all are in the right order. Start with the first page and pick up one sheet from each section of the collator. Make sure you get them in order. Pay attention to what you are doing. If they are out of order, it will make a big mess and we'll have to straighten them all out again.

Good example: Put all these papers in order. First take this one (point). Now this one (point). The next one (point). (Repeat only if the client needs more guidance.) Straighten the pile like this (demonstrate). Put the papers here (point). Now put another set together by yourself.

Notice how the good example includes pointing and demonstration but has much less talk. Remember, if telling doesn't work, show. If showing doesn't work, help.

Teaching to criterion. A common practice in rehabilitation facilities is to provide a minimal amount of training on a new task to a client and then assign him to do the task. Often, the client has not yet learned the task well enough to do it without help. The supervisor must continually provide help and often, to save time, ends up doing part or all of the task himself.

In these cases, it might be better for the supervisor to concentrate on teaching the task to one client at a time. Once the client learned the task to a high criterion (perhaps 95% correct without help), then the supervisor could provide less help and return to his usual supervisory contacts with clients. Although this approach might require help from another supervisor while training is going on, it can result in much higher productivity at a lower cost in supervisor time.

Checking. Very often, clients are assigned to a task (and perhaps even trained to high accuracy) but then ignored afterwards. When this happens, accuracy and rate tend to slip. Check periodically to see that accuracy and rate are staying high.

Using praise. You have probably heard, over and over, that you should use praise instead of criticism. Research has shown that praise can be a very effective motivational tool. It often works as a powerful reinforcer. In using praise to increase production, you should ask three questions. How often should I praise?

When should I praise? How should I praise?

Let's start with the question of "how often." There are two main issues to consider. The first involves the client's Individual Program Plan (IPP). If a client is expected to remain in sheltered employment, or is new to the facility, or needs to increase productivity, then frequent praise is called for. If a client is being considered for placement in competitive employment, the IPP may call for less frequent praise. This is because the client will need to work independently in order to succeed in competitive employment. Superivisors in competitive jobs do not usually give lost of praise. Thus, you may intentionally give very little praise to a client whose IPP specifically states that she is to be placed in a competitive job in the near future and should be working for long periods with infrequent praise. Be careful, though. Do not use this as an excuse for not praising clients in general. Restrict praise only when the IPP says to do so.

The second issue involves the *question of acquisition* (learning) *versus maintenance*. When a task is being learned, the client should be praised frequently for paying attention and for doing the task correctly. Initially, praise should be given; the client should have to do more of the task to get praised. Once the client has learned the task and is doing it at a high productivity level, then praise should be given only occasionally.

A general rule of thumb for how often to give praise is that you should praise about *one time per minute*. If you are supervising 10 clients who are already doing their work well, one praise per minute means that each client will be praised about one time each 10 minutes. That should be frequent enough to maintain their behavior. If you are working with clients who are less skilled and need more supervision, you will probably supervise fewer clients; if you have 5 clients, each will be praised about once every five minutes. Of course, you will praise some clients more often than you praise

others; individuals' praise rates should be based on their IPPs and on their productivity at the job being supervised.

(See Self-Test #3)

The next question asks *when* to praise. *Praise improvement*. While you may praise a client at first simply for starting to work, you should soon require that the person *continue* working before you praise. Do not continue to praise clients for starting to work, and never praise clients when they are showing worse behavior than usual.

The final question asks *how* to praise. There are several characteristics of praise statements that can make them more effective. Here are some guidelines:

a. Praise during or immediately following the behavior you want to maintain or increase. Do not wait till break time or till the client has begun to do something else.
b. Make the praise sincere. Look for some improvement that you genuinely believe is praiseworthy. Cients will be able to tell when you are faking it. It may take practice to learn how to watch for behaviors to praise
c. Sound enthusiastic, but don't overdo it. The client should be able to tell, without even hearing the words, that you are praising. On the other hand, don't talk to clients in a singsong voice.
d. While praising, look at the task. Don't draw the client away from the task. If the client has just completed a task, look at the client's eyes when praising.
e. Make your praise descriptive but brief. That is, praise what the person has done (e.g., "you packaged a whole box of matchbooks already.") not what a person is (e.g., "you are being good.") In other words, *describe*, don't evaluate. A one-sentence description (or less) is usually enough. Longer descriptions tend to pull the

client away from the task.

f. Occasionally praise across the work area. When doing so, use the client's name (e.g., "Kim, you are really working hard today.") In this way, you avoid the problem of clients watching you to see where you are and working only when you are near.

(SEE SELF-TEST #4)

Making Criticism Effective

There are times when you cannot avoid criticizing clients for disruptive behavior or poor work. You cannot always wait until the client begins to work so you can praise.

When should you criticize? As with praise, criticize during the inappropriate behavior. Do not wait for the client to return to appropriate behavior before beginning the criticism. Sometimes, a supervisor will wait until break time and then say to a client, "You spent a lot of time goofing off and disrupting other people this morning." It is much better to do the criticizing while the client is in the process of disrupting.

Effective criticism is a way of *giving instructions*. When you criticize, remember the steps in giving an instruction. They are:

1. Tell the person what you want to be done
2. If the task is complicated, break it down into small steps
3. Describe two or three of the steps
4. Ask the client to do those steps
5. If the client does the steps, list the rest of the steps
6. Ask the client to do those steps
7. If he does, repeat the original instruction and have him do the whole task

Here are some other rules that will help to make your criticism effective.

a. Criticize as close to the beginning of the misbehavior as possible. If someone is making an error on a production task, stop him as soon as possible and point it out. Do not allow him to repeat the error several times. If a client begins to disrupt others and you plan to criticize, stop her immediately.
b. Talk in a normal speaking voice. Do not raise your voice or sound sarcastic.
c. Make your criticism descriptive but brief. In as few words as possible, tell the client what she is doing wrong. Do not make the criticism personal. Do not say, "John, you know better than that. You are just being obstinate today." Say, "John, you did not follow my instruction. I asked you to turn off the machine. Please turn it off."
d. When criticizing, tell the client how to correct his error. If he is disrupting others, tell him to return to his work station. If he put too many rubber bands in a package, tell him to take them out and weigh them again.
e. Give a brief reason for doing the behavior. For example, you might say, "Someone might get hurt if the machine is going." Keep the reason brief. One sentence usually is enough. Give the reason only the first time that you give the same criticism.
f. Watch the person to assure that he understands and follows the instruction. Never criticize someone without giving him the chance to correct his error. Once he has corrected it, tell him how he did.
g. Check again a little later to see if he is doing the behavior correctly. If so, praise.
h. Do not lecture. Keep each criticism brief. A criticism should rarely take more than a few seconds.

(SEE SELF-TEST #5)

Giving praise is not difficult. People can learn easily how to give useful criticism and clear instructions. The hard part is finding the time to do so during a hectic work period. Following are some strategies which will help you to find the time:

Circulate around the work floor. One useful strategy for supervisors is to circulate through the area they are responsible for. Circulating (or "cruisin'" allows you to make frequent contact with each worker. Most supervisors already make some attempt to circulate. However, many supervisors spend large proportions of their time behind a desk. Other supervisors actually do the work which is being assigned to clients rather than assuring that clients are working; it is not unusual to see a work area in which a supervisor is doing a production task while several clients are sitting around doing nothing. When circulating, the purpose is to help clients who have difficulties, to praise, to check on the quality and quantity of work, and to teach work adjustment skills.

There are, of course, times when you will have to be at a desk filling out paperwork. There will also be times when problems with one worker will require you to concentrate on that person for a long period. One way to assure that you circulate is to set up times when you will be sure to cruise through the complete work area. Four circulations per day, two in the morning and two in the afternoon should be enough. On these circulations, choose a path to follow which will assure that you check each worker. The pattern should vary from one circulation to the next, but you need to know what route you will take each time so that you can make sure to see and speak to everyone. If you do not plan a route, you may forget to check a worker.

As you circulate through the work area, check each worker. If a worker is doing an acceptable job, pause

and briefly praise her. Once you praise, you do not need to wait for a reaction from the worker. You want the worker to continue working, not to look up and thank you or start a conversation. After you praise, simply move on. If the client begins to talk to you, stop the conversation immediately and move to the next work station.

If a worker is not working, ignore him (unless his IPP includes a program that requires you to do something else). It is usually best not to remind him to return to work. As you move on, look back at him now and then. When he returns to work for a reasonable period of time, praise him across the room.

If a client is working but is not doing the task right, praise him for working and then give an instruction or demonstration so that he can do it correctly. Watch him try to do the task independently. When he can do it, move on to the next worker. Look back at him now and then. After you have given him time to complete the task one or two more times, return to him and check his work.

If you are interrupted by a client or other staff, or for any other reason, make sure to complete the circulation after you return.

Using misbehavior as a cue to praise someone else. If you are having trouble remembering to praise, try using one worker's misbehavior as a reminder to look for someone to praise. Any time you feel like criticizing someone (or actually do criticize someone), look around for another worker who is doing a job correctly. Praise that person across the room.

Keep charts of productivity. Daily production charts will show you whether clients' production rates are improving. You can also use them to show clients how well they are doing. Ways to measure behavior can be found in the module Behavior Observation and Measurement.

(SEE SELF-TEST #6)

Special Methods for Difficult Problems

The strategies above will solve many of the production supervision problems commonly found in workshops. Of course, some workers will not be reinforced by praise. Others require more frequent or powerful reinforcement. There are also problems which cannot be solved simply by giving reinforcement.

Wehman, Renzaglia, and Schutz (1977) provide a description of the types of production problems that supervisors might run into:

Work behavior may be subdivided into learning a skill (acquisition), and then performing it accurately at a high enough rate (production) to meet competitive employment standards. These two processes can be analyzed more closely, however, through a specific description of the client's vocational behavior excesses or deficits.

Acquisition Problem-Discrimination Deficits

A problem typical of severely handicapped workshop clients is failure to attend to the salient cues (size, color, form) of a task. The person ignores relevant variables and instead may try to assemble or sort materials without watching what he or she does or while attending to the wrong cue in the task.

Acquisition can also be impeded by a client's failure to attend to verbal cues of the supervisor. A common characteristic of severely handicapped adults is non-compliance behavior and inability or unwillingness to follow simple instructions. Even though a worker may attend to the learning task, his failure to follow instructions can interfere with acquisition rates, particularly if job re quirements or materials vary slightly from day to day.

Acquisition Problem-Sensory-Motor Deficits

Many severely developmentally disabled persons receiving vocational programming services also display sensory motor deficits. For instance, clients with cerebral palsy, loss of limb, and spasticity or athetosis may require prostheses or specially arranged environmental support.

Certain clients may be visually handicapped or hearing impaired, thus prohibiting the use of standard training procedures. The rare combination of both aural and visual handicaps in retarded workers is perhaps the most difficult disability to overcome for the acquisition of complex work skills.

Low Production-Slow Motor Behavior

Once a vocational task is mastered, high rate of performance becomes important. This is a serious problem with many severely and profoundly retarded workers, particularly those with a long history of institutionalization. Slow motor behavior is one characteristic of severely developmentally disabled workers who have not previously been required to meet a work criterion for success. Clients may be persistent and stay on task, but their actual motor movements are lethargic and at far too low a rate to be competitive. Often such clients are unresponsive to the commonly used workshop incentives such as praise or money.

Without objectively established work criteria, it is difficult for workshop supervisors to determine which clients are performing competitively. Workers who stay on task and do not disrupt workshop routine are often viewed as performing adequately. This view is based on a popular vocational training model of "work activity" or "keep busy" rather than a developmental model which looks to expand the client's work skill repertoire.

Low Production-Interfering Behaviors

Equally problematic in accelerating production rates

with the severely and profoundly retarded are interfering or competing behaviors, such as high levels of distractability and hyperactivity, out-of-seat behavior, excessive looking around, making bizarre noises, and playing with the task.

Similarly, the work performance of severely developmentally disabled clients may be highly susceptible to changes in the work environment. Fairly commonplace alterations in setting or routine, e.g., furniture rearrangement, can upset work behavior, thus making continuity of programming extremely difficult. A worker may display criterion level work rates, but only for short periods of time. Interfering or competing behaviors interrupt the work level required for successful community placement.

There are a number of supervisory, training, and job design skills which can help to solve these problems. These will be discussed briefly.

Acquisition Problems--Discrimination Deficits. If the problem is that instructions are not followed well, the following techniques might help:

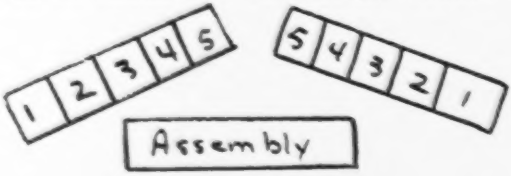
a. Clear task analysis. Prepare a clear task analysis and follow it step-by-step when giving instructions.
b. Model. When giving instructions, demonstrate the task
c. Give only short sequences of instructions. After each two or three steps, have the client do those steps.
d. Reinforce instruction-following. Set up a number of times during the day when you will give instructions that are simple. If the client follows them, reinforce. You should be able to set up 10-20 of these per day. Each instruction should allow for task completion with less than 1 minute work. Instructions might include the following: "Pick up the paper and throw it in the basket," "Take this

box to Jim," and others of that form.

If the problem is that the worker does not attend to relevant parts of the task, such as the direction in which items are placed, the sequence of assembly, or size, the following techniques might help:

a. Color-coding. Color code the pieces. Nuts and bolts of the same size might have a dot of the same color. If the worker is separating magnetic wires from non-magnetic wires, both the magnet and the box for magnetic wires might be red.

b. Put components of a sequenced assembly task in an outside to inside ot left-right order.



c. Provide a sample (either actual or in a picture) which shows what the product is to look like after each step is done.

d. Provide a checklist (in writing or pictorial) that tells each step

Acquisition Problem--Sensory Motor Deficits

Although this module is intended to provide help in working with disabled people, the techniques used for working with acquisition problems caused by sensory-motor deficits are very similar to those which mechanical and industrial engineers use. They are, primarily, the techniques of job analysis and design. Work simplification techniques will be covered in more detail in a later section. Following are two examples:

a. You can adjust the task so that it is done in a different way. For example, two clients can share parts of a task, each doing the parts at

a. which s/he is physically able.

b. You can develop a jig or fixture which allows the worker to do the task. For a client with poor muscle tone, a jig might hold the part being assembled. For a client who cannot count, a packaging task might use a box with the correct number of compartments; instead of counting the parts, the worker could merely fill each compartment.

Low Production-Slow Motor Behavior

If the behavior is being done accurately but at a low rate, increasing the rate to competitive employment standards becomes the goal. Occasionally, the problem is still one of poor discrimination; that is, the worker can make accurate discriminations but they take close concentration and a lot of effort. Other times, the task is physically tiring or has many unnecessary steps in it. In these cases, the techniques described under "*acquisition problems*" may be quite useful. Other techniques may be found in other modules (particularly Increasing Behavior) but will be discussed briefly here.

a. Increase reinforcement or feedback. Often, payment is made by the week and there is very little reinforcement in between. Piecework payment can be made by the day, at break time, or even following each produced item. Simply praising and giving feedback more often may work well.

b. Use powerful reinforcers. If praise and money do not work as reinforcers, other reinforcers may be used. Examples are extra break time, use of a radio, and items the client wants. If necessary, a token economy may be used. Token economies are very powerful, but they are also complex, difficult to establish, and sometimes difficult to remove when they have done their job.

c. Use special reinforcement schedules. You may be able to set up reinforcement schedules which produce faster production. These include Differential Reinforcement of High-Rate Behavior (DRH) in which the worker must complete a number of items in a specified time in order to earn the reinforcer. For example, the worker who is packaging drapery rods may need to package twelve dozen by 10:00 in order to get a soft drink. Ratio schedules may also be used. For example, the worker might be allowed to go to break as soon as she has packaged twelve dozen rods.

d. Provide positive practice with speed prompts. The supervisor may watch or physically guide a client for a long period of time, frequently prompting the person to work faster. The supervisor might stay in this one-to-one session until the worker has met a certain criterion (for example, 60% of competitive standard during a 10-minute period).

e. Provide graphic feedback. The supervisor and worker might set a goal to work toward. Each day, the supervisor could determine the worker's production rate or accuracy and chart it on a graph at the worker's work station. Improvement may serve as a reinforcer, especially if it is charted before the worker goes home for the day and is paired with praise or other reinforcers. The chart may also serve as a reminder to the worker to continue working faster or more carefully.

f. Teach the client self-management. The worker may keep track of his own productivity rate or accuracy. For example, a severely retarded worker might place a marble in a tube each time she completes assembling a circuit board. The number of marbles provide visual feedback. The worker may also reinforce herself. If the number of marbles is above a line drawn on the tube, she may take a break get a soda, or show it to the supervisor (who would then praise her).

Low Production-Interfering Behaviors. Low production can be primarily a result of interfering behaviors, such as stereotyped behaviors (e.g., taking someone else's materials). In such cases, these interfering behaviors must be reduced. The module on Reducing and Eliminating Behavior Problems gives detailed discussions of techniques. Briefly, here are a few:

a. Reinforce incompatible behaviors. Provide lots of reinforcement for production. In addition, reinforce the behaviors of starting to work, working for a period time, or even simply looking at the assigned task.

b. Time-out. If enough reinforcement is being provided during work periods, a time-out may be useful. Time-out may be as simple as removing the worker's work materials or as difficult as moving the person to an isolated area. Remember, however, that time-out means "time-out from reinforcement." If the work place is not reinforcing, taking the person away will not be punishing.

c. Response cost. If some form of token is being used, tokens may be taken away following interfering behaviors.

d. Positive practice. When the worker does an interfering behavior, guide him through a number of trials of an incompatible behavior. If, for example, he takes away someone else's materials, require him to bring the person all the materials he will need for the rest of the day.

e. Reduce distractions. Move the worker to an isolated work area or build barriers between work stations.

f. Self-management. As with increasing production, self-management can be used for decreasing interfering behaviors. The client may keep track of these behaviors and reinforce himself for doing better than he did the day before.

Pitfalls in Supervision

No supervisor will be successful all the time with all the clients. Even the best supervisor will find a production problem that he cannot solve. Trying new techniques and getting consultation from other supervisors and other experts may help in such cases.

There are a number of pitfalls into which supervisors occasionally slip. A few are described here as examples.

Doing work for clients

Often the work in production is done by supervisors. It is easier to do the work than to train and supervise the clients. This happens most often when an important contract must be done very accurately and in a short itme. Remember, contracts are a means for training clients. Your time as a supervisor should be spent supervising and teaching. You need to do each task a few times to make sure you understand it. When you are sure you understand it, teach the clients and make sure that they do the production.

Unwillingness to correct clients for fear they will refuse to cooperate.

Sometimes a supervisor will allow a client to continue to make a mistake because the client is likely to throw a tantrum or become violent. In such a case, the supervisor is teaching a client a very bad lesson. The lesson is, "If you are nasty enough, people leave you alone." You cannot worry about whether it looks bad for a client to throw a tantrum. You are not in the business of keeping everyone calm; you are in the business of teaching people to work.

Focusing on client habilitation while ignoring production schedules.

When clients are having problems, it is easy to forget about the production schedules. Some supervisors spend so much time dealing with non-production aspects of

habilitation that they do not meet reasonable production schedules. It is important for workers to know that they must meet quotas regardless of how they feel. Always keep in mind the importance of high production accuracy and rates.

Focusing on production schedules while ignoring habilitation.

Some supervisors are so concerned about increasing production that they forget about the other needs of the clients. They grumble about sending clients out of the work area for training in independent living skills, for counseling, or for therapy. They do the work for the clients so that production rates will be high. They try to keep clients who should be placed in competitive employment while trying to keep out lower-functioning clients. These supervisors must remember that the purpose of production is to habilitate clients and teach work behaviors and attitudes.

Having low expectations

Many supervisors underestimate the production capability of the clients and accept slow or shoddy performance. Always remember that any client can improve. This does not mean that all cients will reach competitive standards. It simply means that you should always expect that a client can do just a little better than she is doing, and you should strive for that result.

References

Wehman, P., Renzaglia, A., and Schutz, R. Behavioral Training Strateiges in Sheltered Workshops for the Severely Developmentally Disabled. AAESPH Review (now The Journal of the Association for the Severely Handicapped), 1977, 2(1), 24-36.

SELF-TEST #1

1. Define "production." Include all three parts of the definition.

2. List three purposes for production.

SELF-TEST #2

1. List 3 issues involved in choosing among production strategies.

2. Complete Worksheet #1: Choosing a Production Strategy.

SELF-TEST #3

1. List two issues which guide how often to praise.

2/ Cross out the unnecessary words in this instruction:

"Joanie, this lever is an important part for a tractor. I really want you to make it right.

Put the lever arm in the slot. Slide the bolt through the hole. Put the washer on the threaded end. Put on the nut and tighten it. I know you can do it right. Don't look around at the other clients or think about anything else. I want to be able to be proud of you. Just think of how this will help make a good tractor."

SELF-TEST #4

1. Which of the praise statements is best?

   a. "John, you are really being a good worker today"

   b. "You put this one together just right, John. Nice work."

   c. "John, you are working very hard today and doing nice work. Your quality is better than usual. When you work this hard, you earn lots of money. I hope you keep up the good work. I'm proud of you today."

2. How can you avoid the problem of people working only when you are near them?

SELF-TEST #5

1. About how many times should you praise for each time you criticize?

2. What should you do after every time you criticize?

3. Which of the following criticisms is best?

   a. "Diane, you put that wire in the wrong box. Magnetic wires go in the red box. Try again."

   b. "Diane, be more careful."

   c. "Diane, you aren't watching what you are doing. Put the wires in the right boxes. If you don't do it right, we'll have to do it all over again. Please be more careful. You know that being careless is one of your biggest problems."

SELF-TEST #6

1. What are two practical strategies to help a supervisor to praise more?

SELF-TEST 7

1. List two issues which determine how often you should praise an individual client.

2. About how many times should you praise for each time you criticize?

3. Ralph is a client in your facility. He is making cartons for soft-drink bottles. First he must fold the cardboard sections into a box. Then he must put a plastic top on. The plastic top has a slot all around that fits over the edges of the cardboard sides. He must push the top down till the clips on the top catch on the hand-holes.

   Ralph is currently making about six of these cartons per hour. Usually about half the ones he makes are correct. Most of the errors involve putting the top piece on. Ralph forgets to push it down all the way or does not fit all four sides into the slot.

   How can you improve Ralph's speed and accuracy? List three ways. Describe them in detail. For example, one way might be to have Ralph show you each completed carton so that you can praise every time he does one correctly.

WORKSHEET #1: Choosing a Production Strategy

A sheltered workshop has a contract to make pallets. The workshop has the necessary tools. Production of pallets has been a major part of the agency's work for several years and will probably continue. A pallet crew of 8 clients has worked on these for the past year. These clients are all working at 80% of competitive standard or better. Most of the other clients are collating, separating soft-drink cans, or doing busy work. A new company has contracted with the agency for making wood T's and surveying stakes. *

1. Who would you assign to making T's and stakes? Why?

2. Would you emphasize minimizing
   a) training costs, or
   b) production costs?
   Why?

* This test order will determine whether the company will continue to order these. The contract will take about 8 weeks to complete.

APPENDIX (from McLaughlin and Wehman-Vocational Curriculum for Severely Handicapped Students CESA)

Table 2

I. Learning or Acquisition Problem-Discrimination Deficits

1. Verbal instructions

2. Model and verbal instruction

3. Verbal and physical guidance

4. Break task down into simpler steps (easy-to-hard sequence) and repeat steps 1-3

5. Cue redundancy or stimulus fading depending on task

6. Steps 1-5 are always accompanied by reinforcement for correct responding

II. Learning or Acquisition Problems Due to Sensory-Motor Deficits (assess handicap to be sure there is a physical problem)

A. Poor motor coordination
   1. verbal instructions
   2. model and verbal instructions
   3. physical and verbal guidance
   4. break task down into simpler steps (easy-to-hard sequence) and repeat steps 1-3
   5. prosthetic device or physical arrangement of materials
   6. cue redundancy or stimulus fading
   7. same as above step 6

B. Visually handicapped
   1. verbal instructions (detailed)
   2. physical guidance and verbal instructions
   3. tactile cue redundancy and repeat steps 1-2

C. Acoustically handicapped
   1. gestural instructions
   2. physical guidance
   3. break task down into simpler steps (easy-to-hard sequence) and repeat steps 1-2
   4. cue redundancy or stimulus fading depending on task

D. Deaf-Blind
   1. physical guidance
   2. tactile cue redundancy

III. Low Production-Slow Motor Behavior

1. verbal prompt (i.e., "work faster")
2. verbal prompt plus model
3. physical prompt (paired with verbal)
4. reinforcer proximity
   a. pennies present
   b. back-up present also
5. increase frequency of receiving pennies
6. increase amount of pennies and/or back-ups
7. increase frequency of redemption of pennies
8. verbal reprimand plus no reinforcement
9. response cost
10. isolation-avoidance
11. positive practice
12. presentation of aversive stimuli

IV. Low Production - Interfering or Excessive Behavior

(representaitve classes include:
a. nonfunctional competing behaviors
b. bizarre noises
c. out-of-seat
d. aggression vs. objects
e. eggression vs. people)

1. verbal reprimand and prompt
2. verbal reprimand and physical prompt
3. reinforcement proximity (pennies then back-up)
4. increase frequency of receiving reinforcement (pennies)
5. increase amount of pennies and/or back-up
6. increase frequency of redemption
7. response cost
8. time-out
9. restraint
10. overcorrection-positive practice
11. isolation-avoidance
12. presentation of aversive stimuli